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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/404,313	09/24/1999	TATSUHIKO AMAGAI	Q055935	8283
44987	7590	08/05/2005		
HARRITY & SNYDER, LLP 11240 WAPLES MILL ROAD SUITE 300 FAIRFAX, VA 22030			EXAMINER HARPER, KEVIN C	
			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/404,313

Applicant(s)

AMAGAI ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-24, 27-31, 33 and 34 is/are allowed.
- 6) ☒ Claim(s) 14 and 15, 25-26 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

Applicant's arguments, filed January 26, 2005 with respect to claim 33 have been fully considered and are persuasive. The rejection of this claim has been withdrawn.

Applicant's arguments with respect to claims 14-15, 25-26 and 32 have been fully considered but they are not persuasive.

1. Applicant argued Yokoyama does not disclose reading a header portion from shared memory. However, the lower layer processor (fig. 8, items 100-3) retrieves headers from a memory (item 30; col. 6, lines 66 through col. 7, line 2; col. 4, lines 57-62). The lower layer writes the header at the time of packet data reception and reads the header at the time of packet data transmission (col. 9, lines 16-20 and lines 30-32; col. 9, lines 33-35 and lines 59-62).

2. Applicant argued that Yokoyama does not disclose the lower layer portion and the higher layer portion accessing the same memory space. However, the memory space is the same for packet writing and reading (col. 9, line 11 and line 18; note: the same memory space E3 is used by both processors).

3. Applicant argued that Yokoyama does not disclose processing higher than layer 3. However, Yokoyama discloses layer 4 processing (fig. 8).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 2666

Claims 14-15, 25-26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al. (US 5,303,344) in view of Albal et al. (US 4,821,265) and Stoner et al. (US 6,052,383).

4. Regarding claims 14-15, 25-26 and 32, Yokoyama discloses a packet processing apparatus (Figure 8) for converting packet data through several layers (abstract, lines 10-21). The apparatus comprises a shared memory (item 30) for storing in a same memory space part of each of the packet data accessed by the layer 2 and layer 3 processing (Figure 10; col. 6, line 61 through col. 7, line 2). However, the apparatus does not disclose a packet memory for storing the entire packet. Albal discloses a packet memory (Figures 1 and 2, item 19) for storing an entire packet at a communication interface in order to hold packets not ready for transmission from the interface (items 60, 62, 84 and 86; col. 7, lines 61-64). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a packet memory in the invention of Yokoyama. Further, Yokoyama in view of Albal does not disclose that the layer 2 and layer 3 processing processors access the shared memory through separate buses. Stoner discloses separate component buses (Figure 1, items 9, 11, 13 and 15) in order to give dedicated access between the components (col. 4, lines 11-14 and lines 43-54). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have the processors access the memory through different buses in the invention of Yokoyama in view of Albal. Further regarding claim 15, 26 and 33, the shared memory (Figure 8, item 30) has multiple ports and layer 2 and 3 processing is performed according to the OSI model (col. 5, lines 11-18).

Allowable Subject Matter

5. Claims 16-24, 27-31 and 33-34 are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

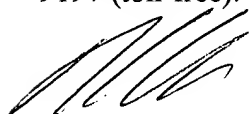
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

August 2, 2005



LANG TON
PRIMARY EXAMINER